



European Patent Office
80298 MUNICH
GERMANY
Tel. +49 (0)89 2399 - 0
Fax +49 (0)89 2399 - 4465



Vogel, Dany
Isler & Pedrazzini AG
Gotthardstrasse 53
Postfach 1772
8027 Zurich
SUISSE

For any questions about
this communication:
Tel. +31 (0)70 340 45 00

20.02.08

Date
20.02.08

Reference P144557 PI/DV/S	Application No./Patent No. 03738960.8 - 2310 PCT/US0316394
Applicant/Proprietor Pioneer Laboratories Inc.	

Communication

The European Patent Office herewith transmits as an enclosure the supplementary European search report under Article 153(7) EPC for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

- ☐ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

Refund of the search fee

If applicable under Article 9 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





European Patent
Office

SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application Number
EP 03 73 8960

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	FR 2 797 179 A (GAU MICHEL [FR]) 9 February 2001 (2001-02-09)	1-4, 8-12, 17, 25, 26, 28-35, 40	INV. A61F2/44
Y	* pages 6-8 *	5-7, 18-21, 23, 24, 35, 36, 41, 42	
X	FR 2 372 622 A (FASSIO BERNARD [FR]) 30 June 1978 (1978-06-30)	1, 8, 9, 17, 25-28, 32	
X	* pages 1-3 *		
X	DE 101 30 825 A1 (STEFFEN HELGE [DE]) 7 March 2002 (2002-03-07)	1	
X	* paragraphs [0001] - [0004] *		
X	WO 91/05521 A (GROSS ULRICH [DE]; SCHMITZ HERMAN JOSEF [DE]; KADEN BERTRAM [DE]; FUHR 2 May 1991 (1991-05-02)	28, 32, 34	TECHNICAL FIELDS SEARCHED (IPC)
Y	* pages 3-10 *		A61F
Y	US 5 893 889 A (HARRINGTON MICHAEL [US]) 13 April 1999 (1999-04-13)	5, 18, 19, 35, 36, 42	
Y	* column 2, line 55 - column 4, line 44 *		
Y	FR 2 805 985 A (EUROSURGICAL [FR]) 14 September 2001 (2001-09-14)	6, 7, 41	
Y	* pages 4-5 *		
Y	US 2002/035400 A1 (BRYAN VINCENT [US] ET AL) 21 March 2002 (2002-03-21)	20, 21	
	* paragraphs [0082] - [0104] *		
	-/--		
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place or where		Date of completion of the search	Examiner
Munich		8 February 2008	Buchmann, Gerhard
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	



DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	FR 2 787 014 A (DIMSO SA [FR]) 16 June 2000 (2000-06-16) * page 8, lines 5-13 *	23,24	
X,P	WO 02/087480 A (SPINECO INC [US]) 7 November 2002 (2002-11-07) * pages 18-22 *	1,8,9, 25,26, 28,31-33	
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			TECHNICAL FIELDS SEARCHED (IPC)

Place of search

Munich

Date of completion of the search

8 February 2008

Examiner

Buchmann, Gerhard

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons
& : member of the same patent family, corresponding document



CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:
- ☒ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-42

A spinal artificial disc comprising upper and lower central bearing surfaces and upper and lower outer bearing surfaces extending radially outward from the central bearing surfaces, the central bearing surfaces being spaced by a greater distance than the outer bearing surfaces.

2. claims: 43-53

A spinal artificial disc comprising upper and lower plates having a central projection, and a resilient annular load bearing member between the plates, and a bumper member to limit the deformation of the annular member.

3. claims: 54-63

A spinal artificial disc comprising upper and lower bearing shells, a central bearing portion the slidably supports the shells, and an annular outer bearing portion extending around the central bearing portion.

The features which are common to the inventions 1, 2 and 3 are:
A spinal artificial disc comprising a central and an outer bearing portion.

These common features, however, are already known from FR-A-2797179. This document discloses a spinal prosthesis comprising a central bearing portion (8) and an outer bearing portion (14).

Apart from these features, the present 3 inventions, are completely different in their functions and technical features:
Invention 1 is a more or less rigid implant for sliding against the vertebral endplates.

Invention 2 is an artificial disc fixed to the vertebral endplates and allowing elastic motion between the disc endplates.

Invention 3 is an artificial disc fixed to the vertebral endplates and allowing articulating motion between the disc endplates.

Hence, the above 3 inventions have neither common features making a contribution over the prior art, nor corresponding features which would solve the same problem.

Therefore the above 3 inventions are not linked by a single inventive concept in the sense of Rule 44 EPC.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 73 8960

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

08-02-2008

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2797179	A	09-02-2001	DE 50010295 D1	16-06-2005
			WO 0108612 A1	08-02-2001
			EP 1198209 A1	24-04-2002
			EP 1563809 A2	17-08-2005
			ES 2241656 T3	01-11-2005
			US 2002156528 A1	24-10-2002
			US 2006173544 A1	03-08-2006
FR 2372622	A	30-06-1978	NONE	
DE 10130825	A1	07-03-2002	NONE	
WO 9105521	A	02-05-1991	DE 8912648 U1	22-11-1990
			EP 0497803 A1	12-08-1992
			US 5306308 A	26-04-1994
US 5893889	A	13-04-1999	NONE	
FR 2805985	A	14-09-2001	EP 1261302 A1	04-12-2002
			WO 0168003 A1	20-09-2001
			JP 2003526456 T	09-09-2003
			US 2003191534 A1	09-10-2003
US 2002035400	A1	21-03-2002	NONE	
FR 2787014	A	16-06-2000	AT 333256 T	15-08-2006
			AU 766217 B2	09-10-2003
			AU 1568200 A	03-07-2000
			CA 2354169 A1	22-06-2000
			DE 69932448 T2	28-12-2006
			EP 1139932 A1	10-10-2001
			WO 0035382 A1	22-06-2000
			JP 4019631 B2	12-12-2007
			JP 2002532139 T	02-10-2002
			US 6582466 B1	24-06-2003
			ZA 200104842 A	21-01-2002
WO 02087480	A	07-11-2002	CA 2441384 A1	07-11-2002
			CN 1541081 A	27-10-2004
			EP 1377238 A1	07-01-2004
			JP 2004527317 T	09-09-2004
			US 2003023308 A1	30-01-2003
			US 6478822 B1	12-11-2002